

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERC United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/696,384 10/29/2003		0/29/2003	Mahesh Chaubal	IFT-5657A-1A1C6	IFT-5657A-1A1C6 8266	
29200	7590	09/14/2006		EXAMINER		
BAXTER I		CARE CORPORA	OH, SIMON J			
DF2-2E	IAICEWA	.1		ART UNIT	PAPER NUMBER	
DEERFIELD, IL 60015				1618		

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/696,384	CHAUBAL ET AL.					
Office Action Summary	Examiner	Art Unit					
	Simon J. Oh	1618					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status		•					
1) Responsive to communication(s) filed on 26 Ju	ine 2006						
· <u> </u>	· · · · · · · · · · · · · · · · · · ·						
	<i>,</i> —						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.					
Disposition of Claims							
4)⊠ Claim(s) <u>1-46</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-46</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
9) The specification is objected to by the Examiner	г.						
10) The drawing(s) filed on is/are: a) acce	•	Examiner.					
Applicant may not request that any objection to the	•						
Replacement drawing sheet(s) including the correcti	on is required if the drawing(s) is obj	jected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).					
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
Copies of the certified copies of the prior	ity documents have been receive	ed in this National Stage					
application from the International Bureau	* **						
* See the attached detailed Office action for a list of	of the certified copies not receive	d.					
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da						
3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal P						
Paper No(s)/Mail Date	6) Other:						

Application/Control Number: 10/696,384

Art Unit: 1618

DETAILED ACTION

Papers Received

Receipt is acknowledged of the applicant's response and terminal disclaimer, both received on 27 June 2006.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The rejection of Claims 1-46 under 35 U.S.C. 103(a) over Stainmesse *et al.* in view of Cima *et al.* is hereby withdrawn.

Double Patenting

The rejection of Claims 1-46 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-108 of U.S. Patent No. 6,607,784; Claims 1-99 of U.S. Patent No. 6,869,617; Claims 1-84 of U.S. Patent No. 6,951,656; and Claims 1-97 of U.S. Patent No. 6,884,436 is hereby withdrawn in view of the terminal disclaimer filed 27 June 2006.

The provisional rejection of Claims 1-46 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over allowed Claims 1-15 and 18-21 of copending Application No. 09/874,499 and Claims 1-108 of copending Application No. 10/246,802 is hereby withdrawn in view of the terminal disclaimer filed 27 June 2006.

Claim Rejections - 35 USC § 112

Page 3

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode

contemplated by the inventor of carrying out his invention.

Claims 1-46 are rejected under 35 U.S.C. 112, first paragraph, because the specification,

while being enabling for itraconazole, budesonide, carbamazepine, prednisolone, nabumetone,

does not reasonably provide enablement for other pharmaceutical compounds. The specification

does not enable any person skilled in the art to which it pertains, or with which it is most nearly

connected, to make and use the invention commensurate in scope with these claims.

The factors to be considered in determining whether a disclosure meets the enablement

requirement of 35 U.S.C. 112, first paragraph, have been described in *In re Wands*, 8 USPO2d

1400 (Fed. Cir. 1988). Among these factors are: (1) the nature of the invention; (2) the state of

the prior art; (3) the relative skill of those in the art; (4) the predictability or unpredictability of

the art; (5) the breadth of the claims; (6) the amount of direction or guidance presented; (7) the

presence or absence of working examples; and (8) the quantity of experimentation necessary.

When the above factors are weighed, it is the examiner's position that one skilled in the art could

not practice the invention without undue experimentation.

(1) The nature of the invention:

Art Unit: 1618

The invention provides methods for producing particles of pharmaceutical compounds having a desired particle size and polymorph by seeding solutions or pre-suspensions of the pharmaceutical compound.

(2) The state of the prior art

Various methods of producing particles of organic compounds such as pharmaceutical agents using precipitation techniques and seeding are known in the prior art. It is generally known in the prior art that the processing parameters of such methods can be manipulated to achieve desired characteristics of such particles, such as size, crystal habit, and polymorphic form.

(3) The relative skill of those in the art

The relative skill of those in the art is high.

(4) The predictability or unpredictability of the art

The unpredictability of the art is high, even if the concepts behind particle production of pharmaceutical compounds are known. The particular method steps, in terms of complexity and number of method steps, for the production of particles of a pharmaceutical compound are required to be specifically tailored to the pharmaceutical compound in question, as well as being tailored for the particular set of desired characteristics, such as size and polymorphic form.

(5) The breadth of the claims

人、相信上於中國國際人工大學學 本外鄉

Application/Control Number: 10/696,384

Trappediction of the engineering of the second

Art Unit: 1618

The claims are very broad. The methods claims are drawn to methods of producing particles of any pharmaceutical compound, with no further limitations given on what sort of solvents and surfactants may be specifically used in the instant claims.

(6) The amount of direction or guidance presented

In the instant specification, the applicant has disclosed several types of techniques for precipitations, such as microprecipitation, emulsion precipitation, solvent/anti-solvent precipitation, phase inversion precipitation, pH shift precipitation, infusion precipitation, temperature shift precipitation, solvent evaporation, reaction precipitation, and compressed fluid precipitation. Additional steps such as seeding and the addition of energy are also disclosed. However, aside from those compounds specifically mentioned in the examples, there is no specific guidance within the instant specification as to which techniques or combination of techniques are suitable for a particular pharmaceutical compound or for producing particles having a particular desired characteristic, such as particle size, range of particle size, or polymorphic form. Thus, there is scant guidance for methods of particle preparation for every conceivable compound that is encompassed by the broad scope of the claims.

(7) The presence or absence of working examples

The instant disclosure does provide working examples, but they are limited to only five pharmaceutical compounds, itraconazole, budesonide, carbamazepine, prednisolone, and nabumetone. Although the particular steps taken to produce the particles of pharmaceutical compounds are described in sufficient detail, there is no further discussion as to why such steps

Application/Control Number: 10/696,384

Art Unit: 1618

or combination of steps are needed to produce particles with the desired characteristics. One example (Example 15) is described as a prophetic example, discussing possible steps that may be taken to produce a stable polymorph of an unspecified compound.

(8) The quantity of experimentation necessary

With the lack of specific guidance from the instant specification, the particular combination of method steps which would be suitable for the production of particles of a particular pharmaceutical compound having a particular set of desired characteristics encompassed within the instantly claimed invention cannot be reliably predicted *a priori*. When the above factors are weighed together, one of ordinary skill in the art would be burdened with undue "painstaking experimentation study" to determine the proper method steps for each and every pharmaceutical compound that is encompassed within the scope of the instant claims.

Response to Arguments

Applicant's arguments with respect to Claims 1-46 have been considered but are moot in view of the new grounds of rejection.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon J. Oh whose telephone number is (571) 272-0599. The examiner can normally be reached on M-F 8:30 am to 5:00 pm.

Application/Control Number: 10/696,384

Art Unit: 1618

Page 7

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Simon J. Oh Examiner Art Unit 1618

sjo

MICHAEL G. HARTLEY
SUPERVISORY PATENT EXAMINER